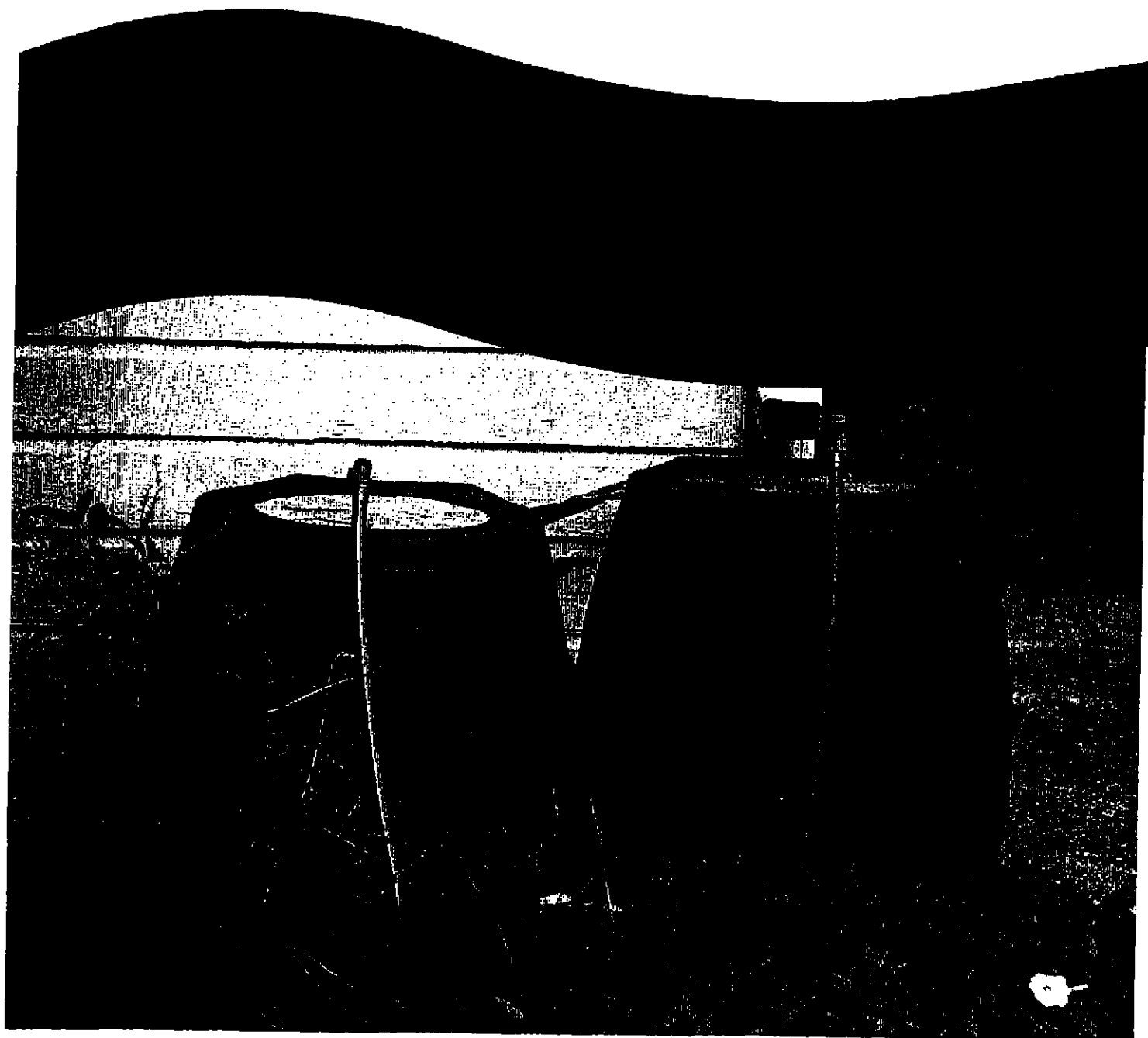




Water Conservation Biennial Report FY2004 - FY2005



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Water Conservation in Austin: A History

In 1990, the Austin City Council set water conservation goals to save money by delaying the need for new treatment plant capacity and purchased water supply. The Water Conservation Program is tasked to reduce peak day demand by 10 percent and average daily demand by 5 percent by the year 2005. In 1999, as part of the water supply agreement with the Lower Colorado River Authority (LCRA), the Council committed to using conservation and reuse to extend the City's water supply from 2040 to 2050. Utility projections estimate that Austin would have to reduce demand by 25,000 - 50,000 acre feet (AF) to extend the water supply to 2050.

In addition, the City has prepaid for water up to 201,000 acre feet per year. Once the City's annual demand for water reaches 201,000 acre feet for two consecutive years, the City must pay an additional \$8 to \$14 million a year. Therefore, the Water Conservation Program is also tasked with reducing demand as much as is feasible by 2021, when water consumption is projected to exceed the 201,000 acre feet trigger.

Water Use in Austin

The City of Austin Water and Wastewater Utility currently serves approximately 192,500 accounts with 2,790 miles of water mains. In FY2004, the City of Austin had a water service population of 786,594 (734,519 retail and 52,075 wholesale customers).

Water demand reached 51,111 million gallons and 48,496 million in 2003 and 2004, respectively. The peak day demand in 2004 was 191 million gallons per day (MGD); in 2005 that figure increased to 237 MGD due to extended dry weather in late September. Residential water use made up roughly 60% of the City's water demand. Although weather causes a substantial variation from year to year, especially in peak day water use, longer-term per capita water use has decreased steadily since 1980.

Water Conservation in Austin Today

Currently, the City of Austin offers a variety of programs designed to develop awareness of the need for water conservation. These programs include incentives to conserve water, services to reduce demand, educational programs and regulatory measures.

INDOOR RESIDENTIAL PROGRAMS

Single Family Toilet Replacement Program

Two City of Austin Water Conservation programs exist to help customers replace older, water-wasting toilets with new, more efficient models. The Free Toilet Program distributes efficient toilets at no charge to homes that receive water from the City of Austin or a City-supplied MUD and have not replaced their toilets since January 1, 1996.

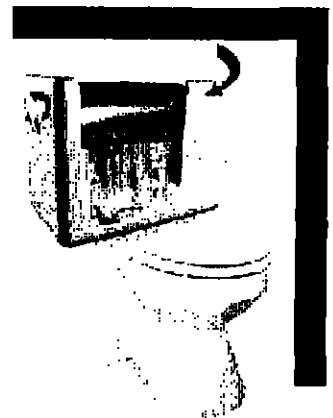
The Toilet Rebate Program offers those same customers the opportunity to purchase a toilet on their own from a list of qualifying models and receive a rebate of the toilet cost, up to \$100.

Both toilet programs require participants to install water-efficient showerheads with a maximum flow rate of 2.0 gallons per minute. The Water Conservation Program provides efficient showerheads at no charge to customers who do not already have them installed. In addition, there is a \$30 per toilet installation rebate if the free toilet is installed by a licensed

plumber. The installation rebate is also available to Toilet Rebate Program participants, but the maximum amount of rebate for both toilet and installation is \$100.

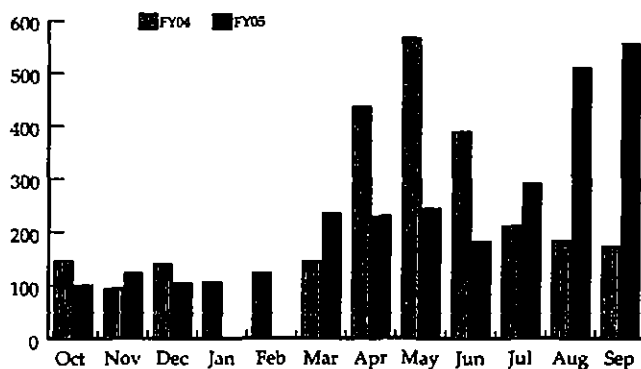
Single-Family customers can receive up to three free water efficient toilets per household through the City's water conservation program to replace old, large capacity toilets. Following submission of an application, customers receive a voucher for redemption at a local plumbing supply company contracted by the City.

During 2003 and 2004, local contractor Deutchman Plumbing supplied the Crane/Universal Rundle

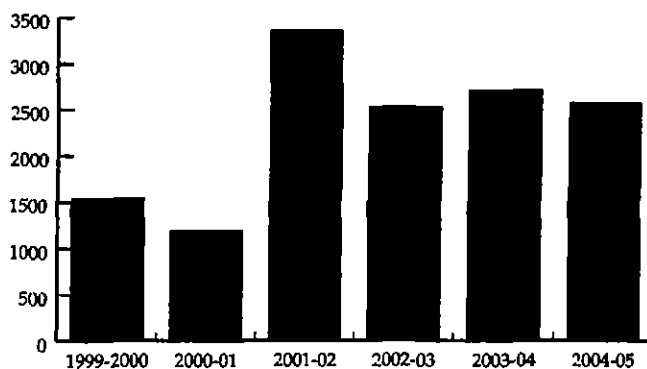


The Niagara Flapperless toilet, distributed through the Free Toilet Program beginning in March 2003, eliminates problems with early-closing and deteriorating flappers.

Free Toilets Distributed



Residential Free Toilets Issued

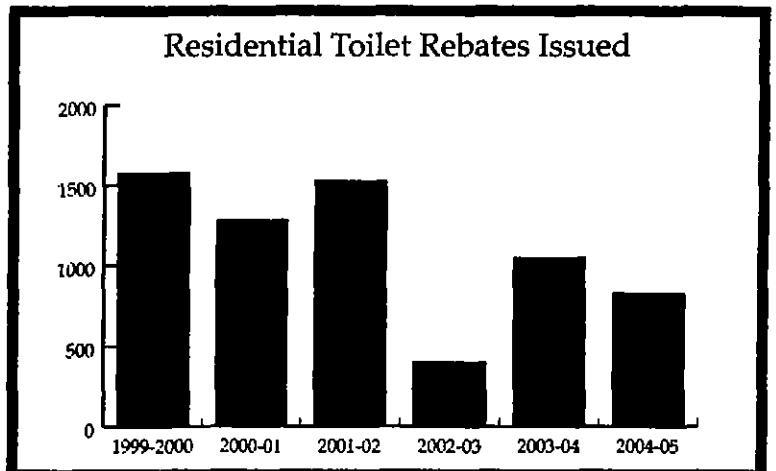
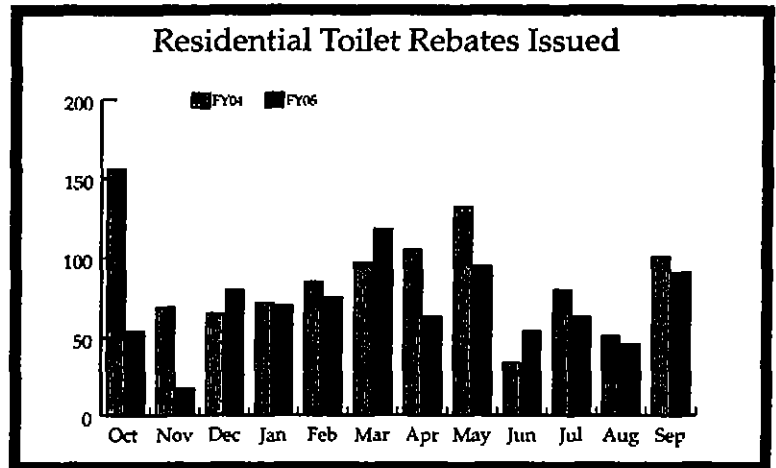


"Atlas" model for the Free Toilet Program. (Elongated models were subject to an additional \$17 charge payable to Deutchman, and ADA models had a \$40 surcharge. If a customer could prove the need for a handicapped toilet with a doctor's note, parking tag or similar documentation, the \$40 charge was waived.

Toilet rebates dropped 21% between FY03-04 and FY04-05. The number of free toilets issued was relatively steady, with only a 5% reduction.

In March 2005, a new contract was awarded to Ferguson Plumbing Supply, who provided the Niagara Flapperless toilet at their two Austin stores. For a period of time, the Niagara Flapperless toilet was only available in the round-bowl model. Until the ADA-compliant toilet (with elongated bowl) became available, Ferguson offered an elongated Mansfield Alto toilet and the Crane Atlas ADA toilet. Customers were not required to pay extra to choose either of these toilets.

In fiscal year 2003-2004, 2,715 free toilets were distributed. The Free Toilet program replaced 2,573 toilets in FY04-05. Rebates were issued for 1047 toilets in FY03-04 and 826 toilets in FY04-05. Since program implementation in 1993, over 51,000 toilets have been retrofitted, representing 18% of all toilets in homes constructed prior to 1992.



WashWise Rebate Program

Residential customers can receive a rebate towards the purchase of an efficient clothes washer. To qualify for a rebate, the washer must meet Consortium for Energy Efficiency's (CEE) Tier 1 standards, under

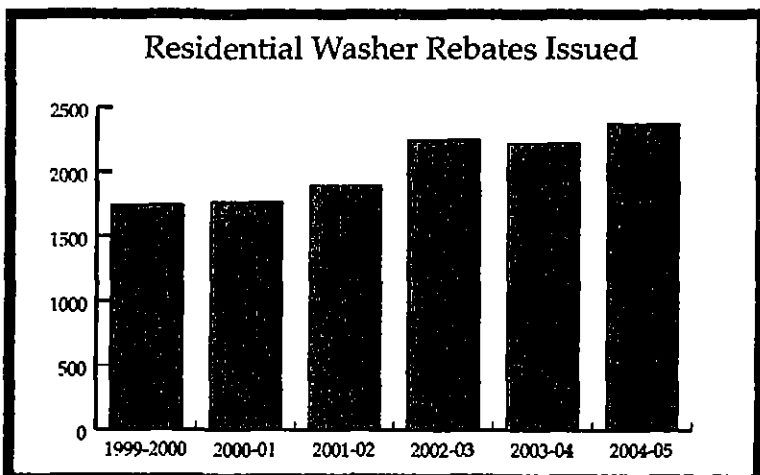
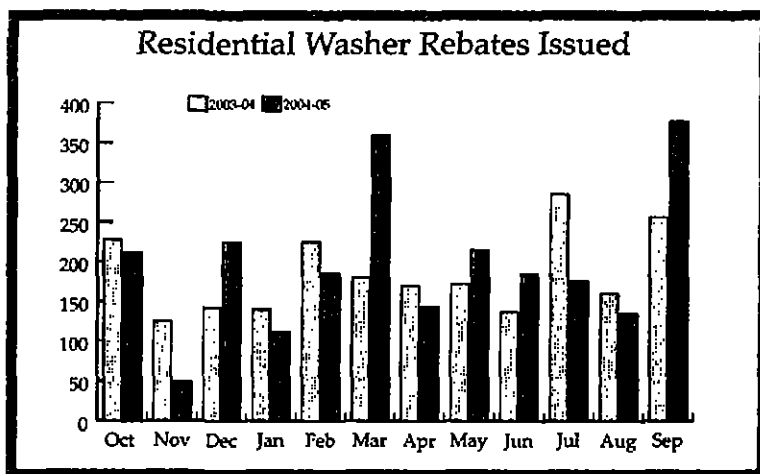
Clothes washer rebates peaked in FY04-05, rising 7% above FY03-04 figures. Nearly 2,400 WashWise Rebates were issued between October 2004 and September 2005.

which a washing machine must use 9.5 gallons of water per cubic foot of capacity or less and have a Modified Energy Factor of 1.42 or greater. These efficient machines save an average of 15 gallons of water per cycle. The standard rebate for these machines is \$50 for water and \$50 for energy saved by either gas or electric water heating.

During the summer of 2004, Austin issued 333 rebates in the Double Your Savings coupon program, a national initiative sponsored by the Energy Star program and washer manufacturers. The WashWise Rebate Program continued to offer up to \$100 on qualifying machines, but the rebate was increased

up to \$200 on participating manufacturer's models, with manufacturers contributing half of the increase. Participation dropped significantly in 2004, since popular manufacturer Whirlpool chose not to participate. Austin did not participate in the program during 2005, since manufacturer participation was sparse and the gap between the CEE list and the Energy Star list of qualifying models had grown.

In 2003-04, the program rebated 2,220 washers, only 28 fewer washers than in the previous year. In 2004-2005, the WashWise program again set a new record for rebates, awarding 2,375, an increase of 7 percent over FY03-04. The increase is more impressive when you consider that Austin did not participate in the Double Your Savings coupon program during that year.



MULTI-FAMILY PROGRAMS

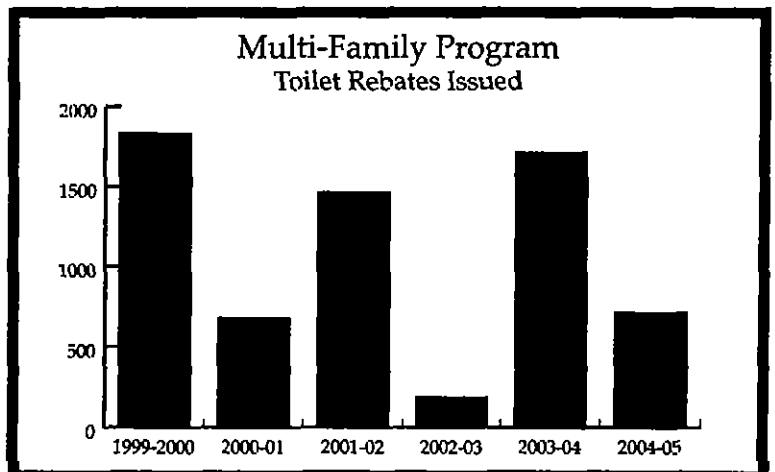
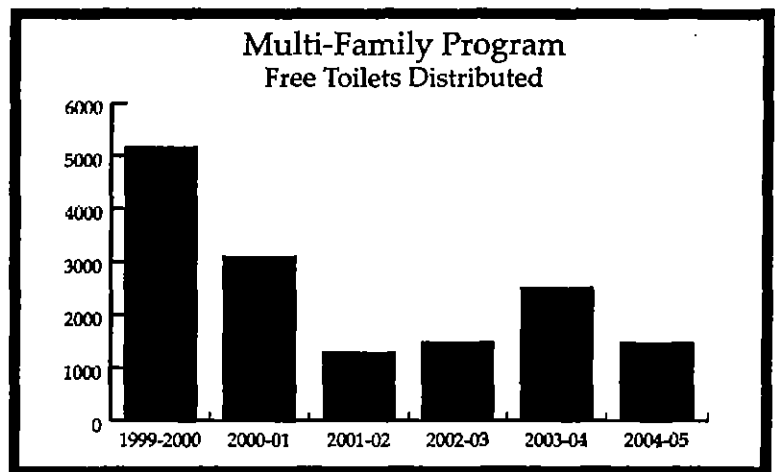
Toilet Programs and Showerhead Distribution

Both the Free Toilet and the Toilet Rebate Programs were available to multi-family customers during the 2003-2005 period. Participants in the Free Toilet Program prior to March 2005 received vouchers for the Crane/Universal Rundle "Atlas" toilet; after the contract was awarded to Ferguson Plumbing, participants were issued vouchers good for the Niagara Flapperless round bowl toilet, the Mansfield Alto elongated or the Crane Atlas ADA toilet. Participants in the Toilet Rebate Program received rebates of up to \$100 toward the purchase and installation of an eligible toilet model.

Multi-family customers were required to schedule both pre- and post-replacement inspections with City auditors. At the post-replacement inspection, participating properties must have installed water efficient showerheads in each unit (available free of charge from Water Conservation). Managers or owners of multi-family complexes could choose to implement the upgrades in phases if needed.

Fiscal year 2003-2004 was an exceptionally successful year for the program, with 2506 free toilets distributed. Only 1476 toilets were replaced through the program in 2004-2005. Multi-family properties participating in the rebate program replaced 1713 toilets during 2003-2004. In the 2004-2005 fiscal year, 714 toilet rebates were paid. The discrepancy in numbers between these two years can be attributed to the size of the properties; while each year had similar numbers of participants, FY03-04 had more large complexes and management companies participating.

Since the program began in 1993, 37,481 toilets have been retrofitted, representing 40% of the toilets in multifamily properties constructed prior to 1992.



WashWise Program

Multi-family customers were eligible for a rebate of up to \$250 per machine (jointly funded by Water Conservation and Texas Gas Service) toward the purchase of efficient coin-operated clothes washers. Coin operated machines in laundromats average 6 cycles per day, and machines in apartment laundry rooms average 3 cycles per day. To qualify for the \$150 water portion of the rebate, the customer must get City of Austin water. To qualify for the \$100 energy portion of the rebate, the customer must have gas water heat fueled by Texas Gas Service and be within the city limits of Austin. To determine which clothes washers qualify for rebates the City relied upon rankings assigned to washing machines by the Consortium for Energy Efficiency (CEE). To qualify for a rebate, the washer must meet CEE's Tier 1 standards, under which a washing machine must use 9.5 gallons of water per cubic foot of capacity or less and have a modified Energy Factor of 1.42 or greater. These efficient machines save an average of 15 gallons of water per cycle.

Thirty-four multi-family clothes washer rebates were given in FY03-04, and nine in 2004-05.

OUTDOOR PROGRAMS

Irrigation Audits

Seasonal watering is the driving factor in the City's peak day water usage. Customers often have a poor understanding of how their controllers work, have multiple programs or start times that they are unaware of, lack a backup battery in their controller, or have heads that mist due to pressure that is too high.



The City therefore offers free irrigation audits to owners of in-ground sprinkler systems who use more than 25,000 gallons per month in the summer.

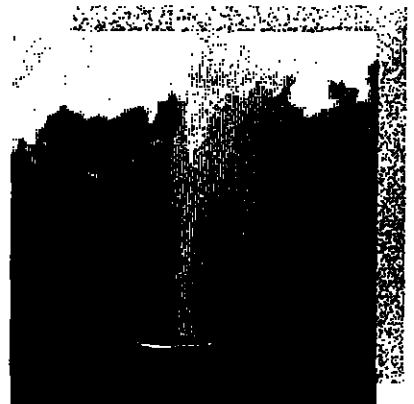
During an irrigation audit, a City auditor checks a customer's system for leaks, water application rates and adequate coverage, then helps determine an efficient watering schedule. The auditor also assesses the efficiency of the equipment and will recommend replacement of components if appropriate. City auditors are licensed irrigators with TCEQ.

Participation in the 2003-04 irrigation audit program was low due to a rainy winter and spring, and fewer staff. The peak-day water use was only 190 MGD, indicating low residential irrigation use. Only 211 residential audits were completed. Commercial irrigation audits were very successful -- 106 were completed, some of which originated from water waste complaints and the WaterWise Restaurant Program. Audits continued to be one of the most popular outdoor programs in the 2003-2004 season, with a 95% customer satisfaction rating.

A dry spring and hot summer caused participation to jump in 2004, with 425 audits performed at residential properties and 74 commercial audits. The irrigation audit program was marketed in utility bill inserts during 2004-05, and through a mailing to the top 2000 water users. Other audit requests were referred from the Call Center or AWU Customer Service representatives in response to high bill complaints especially from new homeowners.

Irrigation System Rebates

Rebates of up to \$150 for irrigation system upgrades are available to residential customers who have had irrigation audits. The incentives were designed to encourage water customers to upgrade existing irrigation systems to increase efficiency, reduce the quantity of water needed and assist the customer in following the City's recommended 5-day watering schedule. A list of products approved for the irrigation system rebate



Broken sprinkler heads and heads misting from too-high pressure are among the most common irrigation system problems noted during audits.

was provided in the application materials; rebate amounts were calculated according to the table below, for a maximum residential rebate of \$150.

Residential irrigation rebate applications have been declining, as many customers have already replaced their controllers with more recent equipment. In 2003, seven residential and three commercial rebates were issued for making recommended repairs to audited irrigation system. Eighteen irrigation rebates were completed in 2003, along with two commercial rebates. Most rebates were for pressure regulating valves and new controllers.

Rain Shut-Off Distribution

The installation of a rain shutoff sensor can decrease water consumption of a typical irrigation system by approximately 11,000 gallons a year. The Water Conservation Program gives these devices free to customers with existing irrigation systems. The devices are ordered from vendors with a preset trigger to shutoff the irrigation system after 1/2 inch of rain. From 2003 to 2004, 67 rain shut-off devices were distributed. None were given out in FY04-05.

Rainwater Harvesting System Rebates

The Rainwater Harvesting Demonstration Incentive Program was modified to allow individuals to receive a larger rebate on an installed system. The previous version of the rebate rewarded \$0.15 per gallon of storage capacity, with a maximum \$500 rebate. The new version covered half the cost of a pump up to \$100, pad materials up to \$100, and first flush parts up to \$35, in addition to the \$0.15 per gallon of storage. The maximum rebate remains at \$500. Ten rainwater harvesting systems were rebated in 2003-04, and four in 2004-05. All rebates were for single-family residences.

In May 2004, the first "Cool House Tour," promoted WaterWise Landscapes, rainwater systems, and Green Building to over 1000 visitors. Additionally, the first annual Green Garden Festival at Zilker Botanical gardens showed the public how the Master Gardeners had installed rainwater tanks to water their greenhouse.

Rainwater harvesting rebates issued in FY03-04 were responsible for 790 gallons per day of peak-day savings. FY04-05 rebates accounted for 316 GPD.

Rainbarrel Sales and Rebates

Through the City's periodic Rainbarrel Sales, customers of Austin Water Utility and qualifying municipal districts (MUDs) can purchase two barrels at a subsidized rate of \$45 each, plus an additional two

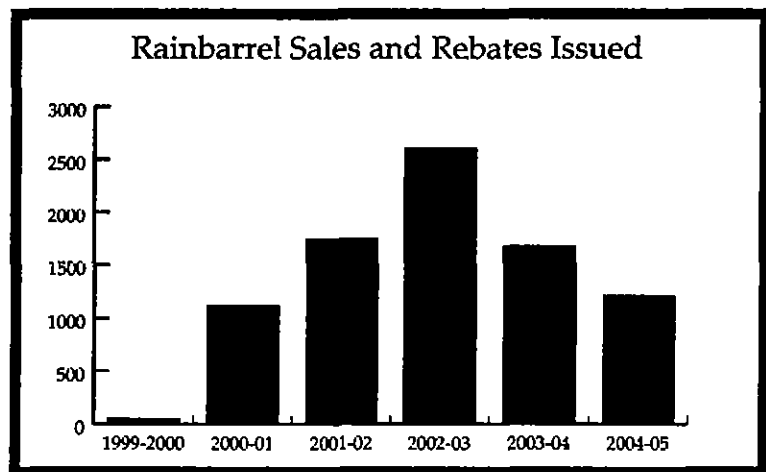
barrels at \$75 each for a total of up to four barrels per account. Out-of-area customers can purchase barrels for \$95 per barrel. Customers who purchase barrels elsewhere can receive rebates of \$30 per approved barrel, up to four barrels per account.

Rainbarrel sales and rebates continued to be popular during the 2003-2005 period. In FY 2004, 1,673 rainbarrels were distributed or rebated. Sales dropped slightly in FY 2005 as the program transitioned to a new warehouse space. With the redevelopment of Mueller Airport, our old warehouse location was closed in December 2004. New space was found at 6014 TechniCenter

Boulevard, off Southbound Highway 183. Staff members Mark Wieland, Amanda Dewees and Craig Kanne built counters and shelves to create a functional sales space, and the warehouse opened for the first rainbarrel sale of 2005 on March 19. In total, 1,209 rainbarrels were sold or rebated in FY04-05.

Rainbarrels were sold to City customers at a discounted rate: \$45 each for the first two, and \$75 each for up to to more.

Rainbarrels included a debris screen, overflow tube and hose with shutoff valve.



WaterWise Landscape Rebate Program

The WaterWise Landscape Rebate Program encourages customers to replace thirsty turf grass with drought-tolerant native and adapted plants. To participate, applicants must submit a landscape plan prior to purchasing plants. Rebates are given for up to 50% of the cost of approved plants, up to \$15 for shrubs, \$30 for small trees and \$100 for large shade trees, and are capped at \$500 with a minimum rebate of \$50. Forty one rebates were completed in FY 2003-04.

It became apparent during 2003 that applicants for the landscape rebates tended to be gardening hobbyists who already had low water use, and that savings from the program were not meeting expectations. To increase water savings while continuing to promote Xeriscaping, the WaterWise Landscape rebate program guidelines were changed. As of April 1, 2004, new rebate applications must meet the following criteria:

- ❖ The property was either built within the past year or has an average summer use of over 20,000 gallons per month for the past three years
- ❖ The landscape plan must include less than 50% of the total landscaped area in grass, and
- ❖ The property must maintain water use at or below the water budget developed by Water Conservation staff for the entire 18-month period beginning six months after installation is completed.

Only six applications have been received under the new program guidelines; of those, only three have completed the program.

Landscape Watering and Peak Day Management

Stage I Water Restrictions and Water Waste

The summers of FY03-04 and FY04-05 continued Water Conservation's campaign against summer watering increases. Information about Stage I water restrictions was distributed through bill stuffers, the WaterWise Newsletter, and on the website. A summer intern was hired to handle water waste calls. Water waste calls come in year around, but especially in the summer time. About 90 water waste calls were investigated, and the summer intern responded with letters and phone calls.

In the summer of 2005, Water Conservation offered an incentive to City employees to report water waste violations that they witnessed throughout the utility's service area. With many employees out in the field throughout the day, it was hoped that the contest would be an effective way to increase water waste reporting. Gift card drawings were held every two weeks for \$100 as an incentive. After slow reporting initial-

ly as the program was first announced, the number of reports began to steadily increase when the Small Calls Department of the Utility's Meter Shop became involved. Since the Small Calls group responds to possible leaks in the street (which often times turn out to be irrigation systems resulting in runoff), they were a useful resource in reporting water waste for the last month of the contest.



Summer Watering Schedule and ET

During summer months, customers are encouraged to water once every five days according to the published watering calendar. The watering calendar helps distribute peak demand throughout the city by assigning watering days by the last number of a property's street address.

Additionally, customers are encouraged to use the evapotranspiration, or ET, amount to replace only the water their lawn has lost to evaporation and transpiration during the previous five days. The ET amount is calculated daily and posted on the Water Conservation website, along with the 5-Day Watering Schedule and links to more information.

ET Calculator Irrigation Efficiency Project

In the spring of 2005, the Austin Water Utility's Water Conservation Division initiated a unique program that combined GIS data and aerial photography with weather information to estimate outdoor water waste. Water Conservation provided the top 1,000 residential customers with an approximation of how much outdoor "over-watering" had been occurring at their property for the past three years based on evapotranspiration (ET) data. These customers use approximately 35,000 gallons or more during the summer months, with the top ten residential customers using a combined amount of over 2 million gallons during August of 2004 alone. By specifically targeting this group of customers, the program aimed to increase water use awareness among the residential customers who needed it most.

The ET calculations were completed using address-specific aerial photographs taken in 2003. The photos provide the lot lines of the individual properties as well as some clarity on the properties' landscape components. Using a polygonal measurement tool created by the Utility's GIS staff, the total outdoor area of the properties was measured and categorized based on the type of plant and the amount of shade.

The landscape amounts were entered into an ET calculator spreadsheet created by the Water Conservation staff, which determined the specific ET requirements for the residence's irrigated area for the past three years based on historical weather station data.



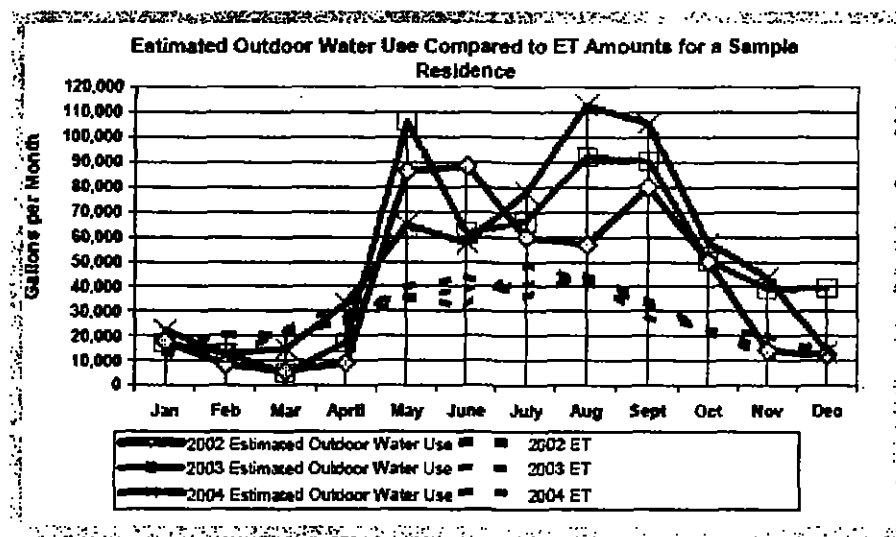
Staff used aerial photography for each property to estimate the area devoted to turf grass, shrubs and impervious cover.

To calculate the amount of water that had been "wasted" each month on unnecessary irrigation, the properties' ET amounts were compared with the homeowners' actual water use (minus estimated indoor water use). The homeowners were sent a personalized letter, a graph depicting their water use versus the ET rate, and savings estimates for both water and wastewater costs. For the top users, potential savings reached into the thousands of dollars and served as a stunning reminder of just how much money they were wasting each year.

Eighteen percent of the customers in the ET mailout responded to schedule an irrigation evaluation - more than three and a half times the response received from previous efforts to reach high water users. Once the irrigation audit was complete, the customers were provided with an efficient schedule that would align their outdoor watering with the calculated ET amounts. A comparison of water use amounts from before and after the irrigation audit yielded mixed results, with an average reduction the month following the audit of 37.5 percent. Two months after the audit was conducted, however, the water use reduction

was approximately 19.42 percent. Much of this could be due to temperatures during the month of September increasing to record amounts of over 100 degrees for five days in a row, causing people to increase their irrigation use. It is difficult to compare winter and summer use, but Water Conservation hopes to see a continued reduction in these customers' 2006 water use.

Many of the on-site irrigation evaluations revealed that the ET calculations had underestimated the customers' recommended outdoor water use. A distribution uniformity (DU) factor for the irrigation system was not incorporated into the initial calculations, which would have increased usage estimates by 40 to 50 percent on average, aligning them more closely with the auditor's recommendations. Irrigation system efficiency varies greatly depending on factors such as head spacing, design and pressure, but selecting a base number for the DU such as a 60% efficiency rate would have increased the accuracy of the calculated ET watering recommendations.



WaterWise Irrigation Professional Seminars & Certification

The WaterWise Irrigation Professional (WWIP) seminar is designed to educate licensed irrigators about water use issues and water conservation programs in Austin. Irrigators receive eight hours of continuing education credits as required by TCEQ. There were three WWIP seminars in 2005 with 135 total attendees:

- ❖ January 11 -- Water Conservation
- ❖ January 26th -- Electrical Troubleshooting
- ❖ March 29th -- Turf Drought Studies

In 2004, 86 irrigators signed up for the WWIP Certification Program. Ninety-three irrigators participated in 2005. The seminar continues to be highly praised by the irrigators. The program provided a valuable service to licensed irrigators, building the relationship between irrigators and the City. Increased interest in the WaterWise Irrigation Program led to more requests for commercial audits and additional irrigation rebate applications. Irrigators benefit from the publicity generated by the WWIP list handed out to homeowners, and Austin Water customers benefit by having a list of qualified irrigators to choose from.

Xeriscape Advisory Board

In 2004, the Xeriscape Advisory Board (XAB) developed a new homeowner education program called "The Garden Roadshow" designed to bring the educational programs to public. This program will select good existing examples of landscaping within a neighborhood and use them as demonstration gardens for a tour of homes. The tour in Jester Estates featured 14 homes. The tour was followed by a well-attended evening presentation of informative talks on subjects of interest to the homeowner and focusing on water conservation.

However, the XAB has suffered a loss of membership during 2004-2005 and regular meetings were discontinued. Nevertheless, the group assisted with promoting water conservation programs at the Austin Cave Festival and the Rollingwood Homeowners Association. Additionally, member Jence Galland has posted the SMARTscape brochure at www.smartscape.org and the XAB hopes to add more landscaping information.

Green Garden

The Green Garden group is made up of five City departments who promote the landscaping programs of the City. Several Green Garden homeowner training seminars were held in FY03-04 and covered native and adaptive plants, landscaping techniques, and lawn care. Due to the popularity of the classes, several lunch time classes were scheduled. The Green Garden Festival in February 2005 gathered a record crowd of 2000 people. Booths featured water conservation, composting, least toxic pest control butterfly gardening and rainwater harvesting.

Talks and Presentations

In addition to the 2003 Garden Roadshows and Green Garden seminars, Water Conservation staff made several presentations to small groups such as garden clubs and neighborhood groups, and presented a talk at a retreat for the TCEQ

Chemical Permit Group.

Topic	Group	Attendees	Date
Rainwater Harvesting	Pond Society	50	10/19/2004
Conservation Programs	Austin Cave Festival	100+	10/30/2004
Conservation Programs	Rollingwood		11/3/2004
Green Gardening	General Public	50	2/3/2005
Green Gardening	Green Garden Festival	2000	2/27/2005
Xeriscaping	Irrigators	70	3/29/2005
Conservation Programs	Crestview Garden Club	20	
Conservation Programs	Water Education Festival	225	4/28/2005
Conservation Programs	KLRU		4/28/2005
Xeriscaping	NACA	50	5/19/2005

COMMERCIAL PROGRAMS

Approximately 40% of all Austin Water Utility water sales are to non-residential entities in the Industrial, Commercial, and Institutional (ICI) sectors. As a result, the ICI water conservation program continued to be a major contributor to the overall water conservation effort. Program activities range from educating facility managers and distributing rebates and free plumbing fixtures to helping guide the development of new standards for the commercial sector.

Whole System Water Conservation Surveys

ICI customers are eligible for a free system-wide water conservation survey of their property. The city auditor will check the water capacity of toilets and washing machines, measure showerhead and faucet flow rates, and look for leaks in pools. Auditors conduct cooling tower audits and review water use in production processes and cooling systems, and examine the potential to use alternate sources of water. Irrigation system audits are also available to ICI customers. Staff performed 128 audits of commercial facilities in FY03-04, and 61 audits in FY04-05. In addition, 106 commercial customers underwent irrigation audits in the 2003-2004 period, and 74 in 2004-2005. Three rebates for irrigation system upgrades were issued to commercial customers in FY03-04, and two in FY04-05.

Large-scale commercial rebates were responsible for over 143 million gallons of water savings per peak day in FY03-04 and nearly 173 MGD in FY04-05.

Special Commercial Rebates

The City offers commercial customers rebates of up to \$40,000 for the installation of new equipment and redesign of manufacturing processes that conserve water. Programs qualifying for this rebate must save at least 500 gallons per day and remain in place for at least five years. Some examples of commercial equipment changes eligible for a rebate are replacing single pass cooling with recirculating or air cooling, reusing high quality rinse water, improving cleaning processes, reusing rinse water for the wash cycle in laundry equipment, and installing other equipment changes that improve water efficiency. Other examples include the capture and use of alternate sources of water such as air conditioner condensate and waste from foundation drain systems.

The rebate amount is based upon the lesser of: (1) half the price of the purchase cost of the equipment, or (2) \$1.00 for each gallon saved per day up to 30,000 gallons and then \$.50 (fifty cents) per gallon saved per day for the next 20,000 gallons, up to a maximum rebate of \$40,000. Operation and maintenance measures are not eligible. Participants must get pre-approval and agree to a post-installation inspection by City

staff to verify installation and operation. Eight rebates were awarded in FY03-04 and six in FY04-05.

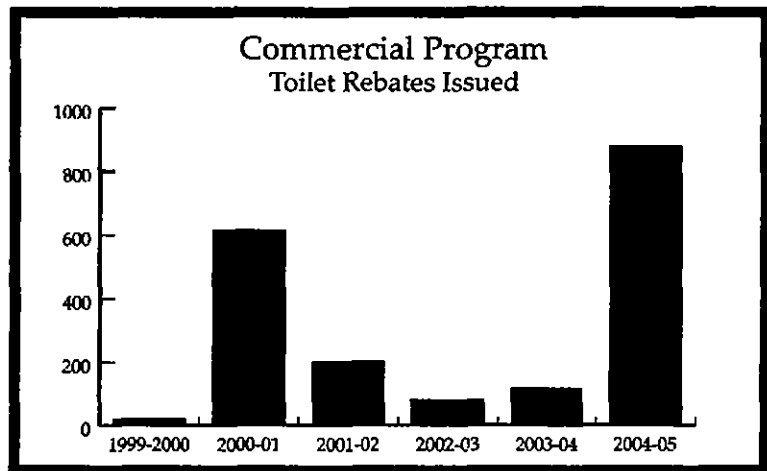
Toilet Replacement Programs

As with the single-family residential and multi-family programs, the City also offers both the Free Toilet and the Toilet Rebate Programs to ICI customers. Included in this customer class are area hotels and motels, restaurants, office buildings, large industries and other institutions and businesses.

After submitting an application for the Free Toilet Program and completing a pre-inspection, customers receive toilet vouchers to redeem at a local plumbing supply company contracted by the City. After installation, a City auditor verified the retrofits and authorized the installation rebate, if applicable.

Participants in the Toilet Rebate Program receive rebates of up to \$100 toward the purchase and installation price of a tank-type toilet model from a list of eligible toilets. For flush-valve toilets, any new toilet will qualify for a rebate of \$110. Installation rebates of \$30 per toilet are also available if a licensed plumber installs toilets obtained through the free toilet program.

If shower facilities are available, participants must also agree to install water efficient showerheads throughout the facility. Showerheads are available free of charge and may be obtained from the City's Water Conservation Program. Although there is no limit on the number of toilet replacements per property that can be made under this program, companies and institutions may choose to implement the upgrades in phases. The City works with each ICI customer on an individual basis to establish a suitable timeframe for the replacements. A pre-inspection is required prior to replacement of toilets and a verification inspection is required once the retrofits are complete. In fiscal year 2003-04, 575 toilets were retrofitted; 1,283 toilets were retrofitted in fiscal year 2004-05.



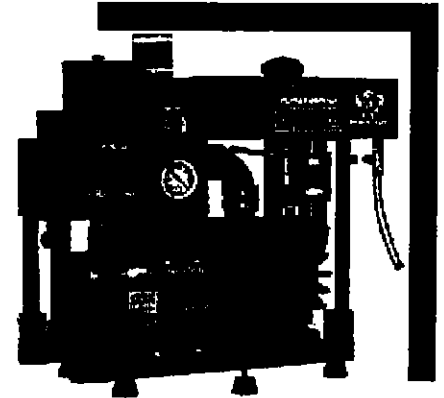
WashWise Program

ICI customers could receive a rebate of up to \$250 per machine towards the purchase of water-efficient coin-operated clothes washers. Customers in this class included owners or operators of commercial clothes washing facilities or clothes washer leasing companies. Some customers also qualified for rebates of up to \$100 on non-coin operated water efficient washers. Five commercial washer rebates were issued in FY03-04, and none were issued in FY04-05.

Dental / Medical Dry Vacuum Rebate

Austin's medical professionals are offered a rebate towards dry medical vacuum pumps purchased to replace older liquid ring vacuum pumps. City auditors inspect the old pumps prior to replacement and new pumps after installation. Customers receiving the rebate also agree to keep the new pump in operation for five years.

The rebate consisted of two parts: a water savings rebate and an energy savings rebate. The amount of the water rebate depended on the horsepower of the replacement dry vacuum pump. For dry vacuum pumps less than 2.5 horsepower, the rebate was \$500 per system installed. For dry vacuum pumps of 2.5 or more horsepower the rebate was the lesser of: (1) half the cost of the purchase price of the equipment, or (2) \$1.00 for each gallon per day saved up to 30,000 gallons, and then \$.50 (fifty cents) for each gallon per day saved up to 20,000 gallons up to a maximum rebate of \$40,000. The amount of the energy rebate was based on the net reduction in horsepower of the dry vacuum system as compared to the liquid ring system it replaced. Ten such rebates were granted in 2003-04 and five in 2004-05.



Dry vacuum pumps installed to replace liquid-ring pumps in dental offices qualified for both an energy and a water rebate. Ten dental offices received rebates in FY03-04, and five more were issued in FY04-05.

EDUCATIONAL PROGRAMS

Dowser Dan School Assembly Program

The Dowser Dan School Assembly Program is a 45-minute live, theatrical presentation on water conservation. The interactive educational program invites student participation through songs and music performed by entertaining characters. During these performances, educational materials printed in English and Spanish are provided at each assembly to promote the conservation message and stress the importance of caring for the environment. The assembly targets first through fourth-graders and runs September through May.

During fiscal year 2003-2004, the program's thirteenth season, two professional actors on staff - Evan Kelley and Frank Delvy - presented "Dowser Dan's Family Values" an adaptation of an original script by Cian G. Connery. The production was directed by Craig Kanne and included original music by Freddy Carnes. The program was offered to schools in the Austin Water Utility service area, including 149 schools in six districts as well as private and parochial schools for an approximate student population of 48,000 in grades 1-4. Staff performed 200 shows in area schools over the 2003-2004 school year.

The Dowser Dan School Assembly Program marked its fourteenth anniversary in 2004 touring the show, "Dowser Dan vs. Wicked Wally's Grand Plan." The script was adapted from an original version written by Cian G. Connery. During the 2004-2005 school year, the program reached 30,648 in 189 shows.

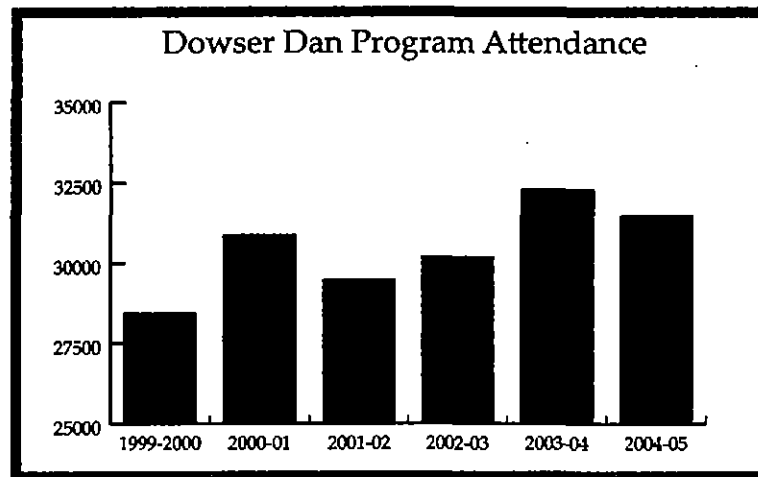
In recognition of the program's longevity, the staff recorded a compilation of popular songs from the show's first thirteen seasons. The resulting musical CD was titled, "Dowser Dan has a Message For You." Teachers were provided with one CD per classroom at each assembly, and additional copies were available for purchase at \$5 each.

In addition, every student who attended the assembly was given a refrigerator magnet printed with tips on saving water at home.

Many students participate in the program for four consecutive years. Reinforcing water conservation over a four-year period allows for the development of efficient water use behavior among the students. It is hoped that water conservation education will result in wise water-use habits during their childhood that will continue into adulthood.



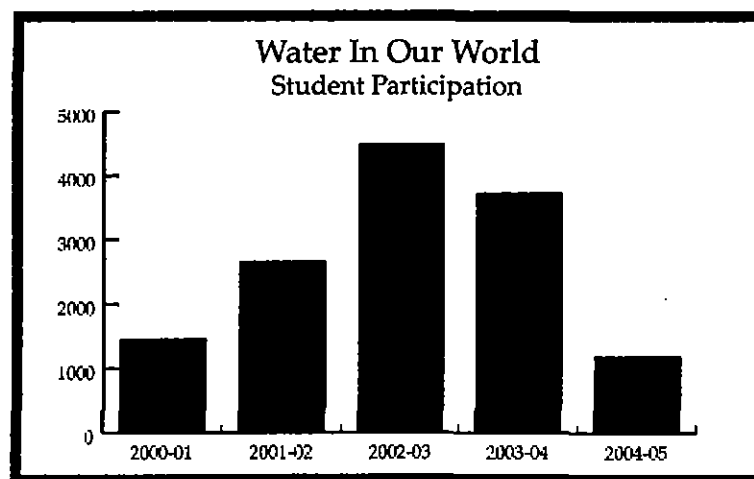
In 2004, the Dowser Dan Show produced a CD of Dowser Dan's greatest hits. Copies were distributed to each Austin-area classroom participating in the assembly program.



Water In Our World Curriculum

The Water in Our World Program was developed in 1999-2000 to address the lack of water education curriculum available to fifth graders. The curriculum addresses water treatment, water conservation, and water quality and represents the cooperative efforts of the Austin Independent School District, the Public Affairs Division of the Austin Water Utility, and the Water Conservation Program. The program is offered free of charge to participating schools in the Austin, Del Valle, Pflugerville, and Round Rock Independent School Districts, as well as private and parochial schools.

A total of 39 schools and 2,225 students participated during the 2003-2004 school year. Participation increased slightly during 2004-2005, reaching 2,446 students in 41 schools.



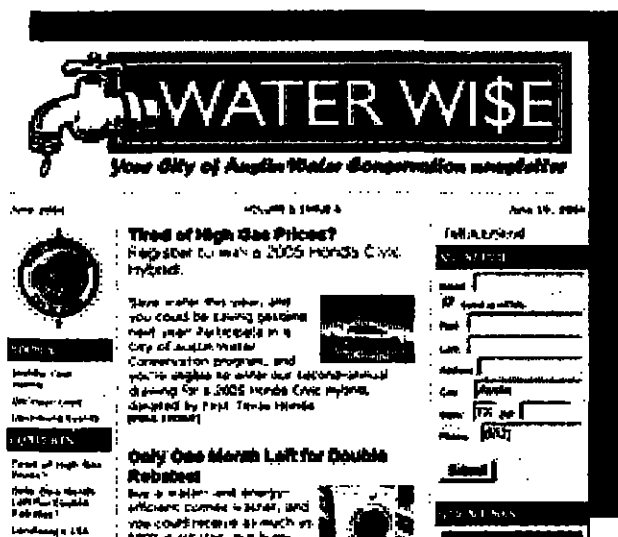
MARKETING PROGRAMS

Water Conservation uses a number of means to reach its customers. Ads in the Austin American-Statesman, inserts in Austin Energy water bills, direct mailings to selected customers, calendar listings, trade shows and radio and television ads are just a few of the methods used to promote the Water Conservation message and inform customers of available services. Specialized marketing efforts included:

WaterWise Electronic Newsletter

The Water Conservation Division of Austin Water Utility began the "WaterWise Newsletter" as an effort to communicate more regularly with our customers and increase participation in water conservation initiatives. Each month a new issue of the newsletter is created and distributed electronically to a database of customers.

Since the newsletter has been operational, feedback has been overwhelmingly positive, and the customer database has grown to over 12,200 individual addresses. Roughly 40% of emails are successfully delivered and opened each month (in HTML format; the service does not track emails opened in plain-text readers). Each WaterWise Newsletter issue gathers an average click-through rate of about 32%, impressive compared to the industry average of 24% for similar electronic newsletters and to the 1-7% response rate expected from traditional direct mail campaigns.



Each issue of the WaterWise Newsletter is sent to over 12,000 customers and generates an average click-through rate of about 32%

Annual Toilet Mailer

In the spring of 2004, Water Conservation produced and sent a pair of direct mail pieces to all households in the service area that were built after 1992 but had not yet replaced toilets through the Water Conservation programs. The first mailer was a foldover card promoting a \$3,000 lifetime savings for toilet replacement; it was followed by a postcard echoing the theme. Response seemed to be positive, although no firm tracking data is available since many customers chose to call or print applications from the internet instead of returning the postpaid card, or claimed to have lost the initial mailing. As a result, it was difficult to attribute participation directly to the mailer.

A second campaign in 2005 offered participants a chance to “transform” their toilets into a free car, referring to the Honda Hybrid Giveaway program. The pieces also promoted the new Niagara Flapperless toilet offered through the Free Toilet Program. In this campaign, also to about 62,000 homes, the mailings were reversed. Customers received a postcard followed by an application card two weeks later. It was hoped that this would increase the number of cards returned.

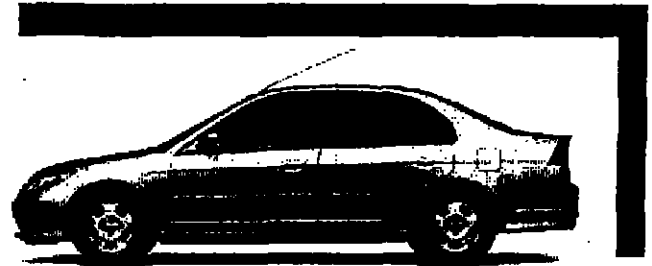
During the six months following the first mailing, 1,970 households from the mailing list participated in either the Free Toilet or Toilet Rebate Programs. If it is assumed that all applications during that time resulted from the direct mail campaign, the campaign generated a better-than-expected response rate of 3.15%. These figures do not include customers in municipal utility districts, or eligible households that may have been overlooked in the mailing list.

Hybrid Car Giveaway

The Hybrid Car Giveaway was created to reach those water customers who are motivated by the desire to win something. Mark Wieland developed the concept for the campaign and solicited area dealerships that offered gas-electric hybrid vehicles. It was hoped that people who would be interested in a hybrid vehicle would also be environmentally conscientious and therefore most likely to also participate in water conservation programs.

Customers receive an entry form after completing one of eight Water Conservation programs: the Free Toilet or Toilet Rebate Program, WashWise Rebate Program, Irrigation Audit & Repairs Program, Rainbarrel Program, Rainwater Collection System Rebate Program, WaterWise Landscape Program or WaterWise seminar. Completed entry forms must be turned in at the dealership to register for the drawing. By making customers visit the dealership in person, Water Conservation could promise between 1000-3000 “walk-ins” to the dealership during the course of the promotion. In exchange, the participating dealership (First Texas Honda) would donate a 2004 Honda Civic Hybrid as the drawing prize. Although the dealer’s participation cost was approximately \$16,000, they were provided additional customer traffic that would normally cost \$100,000 - \$300,000 to generate.

Approximately 1,500 customers submitted entry forms at the car dealership during the first Hybrid Car Giveaway, and Water Conservation exceeded its goals for water use reduction for the year coinciding with the drawing campaign. The program has continued, and grows each year.

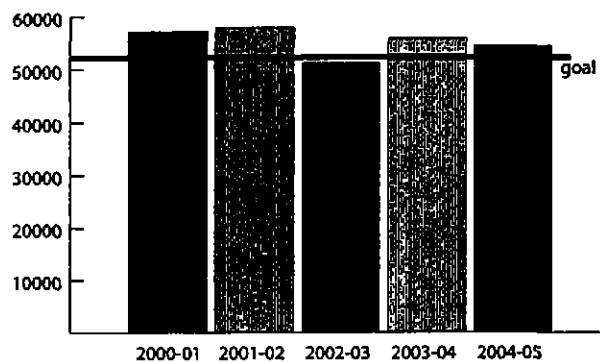


As an additional incentive to participate, customers completing a Water Conservation program were eligible to enter a drawing for a Honda Civic Hybrid.

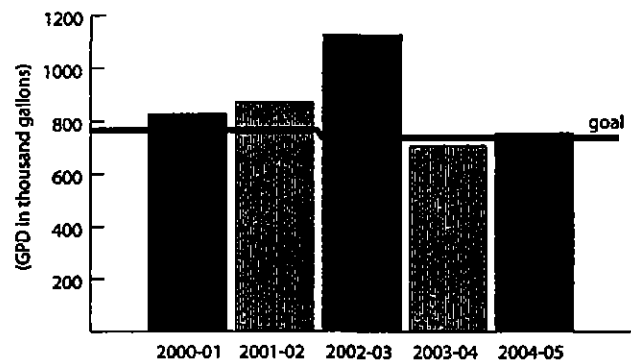
Water Savings Summary

The City of Austin Water Conservation Program measures its success against internal performance goals for both customer participation and peak day water savings. The program fell slightly short of Peak Day Savings goals in 2003-04, but rebounded in 2004-05. Participation remained on-track, at 32% of all customers in 2003-04 and 31% in 2004-05, indicating that about one of every three Austin Water Utility customers participates in a water conservation program each year.

Customer Participation History

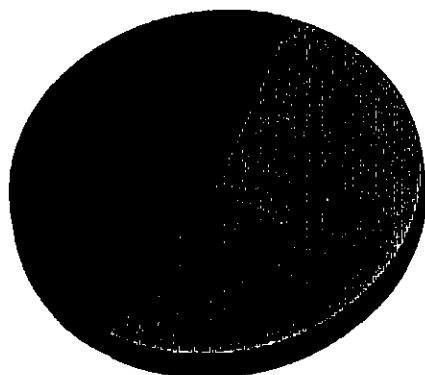


Peak Day Water Savings History

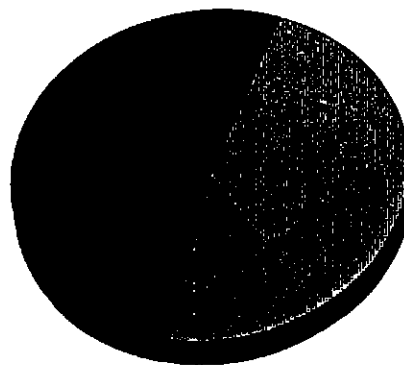


Commercial programs were responsible for nearly half of the program water savings in both fiscal years, with residential programs accounting for about one-third. (Note: figures do not include savings from Green Builder incentives).

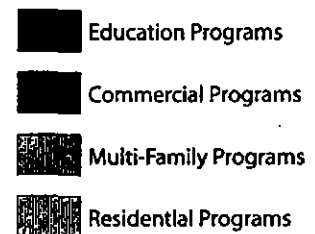
Peak Day Water Savings



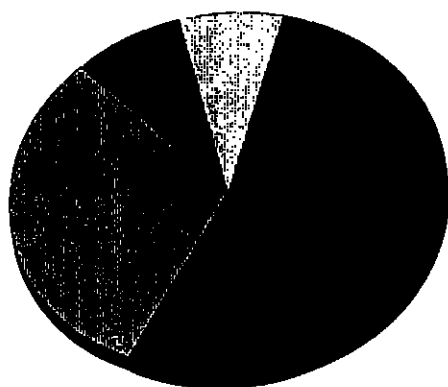
2003-04



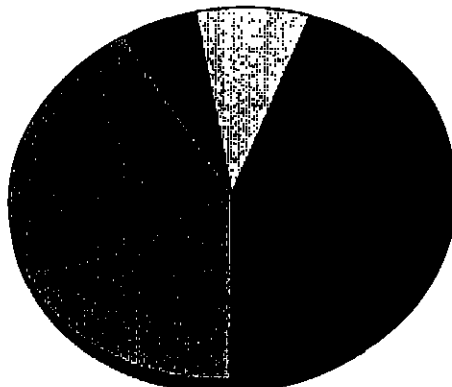
2004-05



Residential Peak Day Water Savings



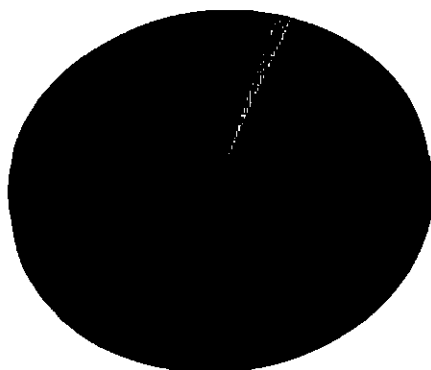
2003-04



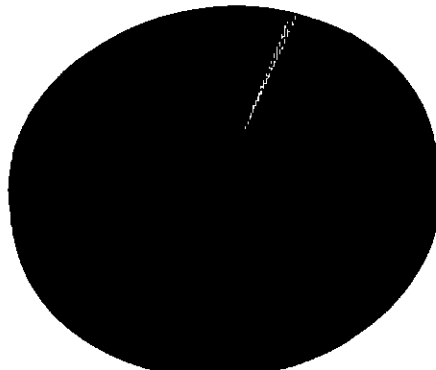
2004-05

- Other
- Showerheads/Aerators
- WaterWise Rebates
- Rain Harvesting
- Irrigation Programs
- Clotheswasher Rebates
- Toilet Rebates
- Free Toilets

Multi-Family Peak Day Water Savings



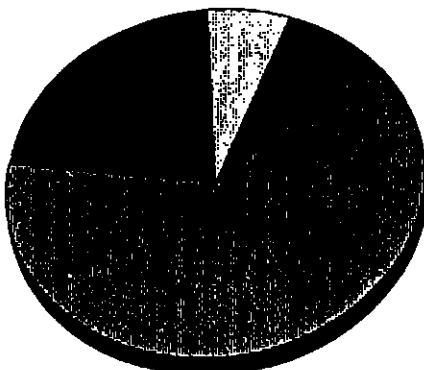
2003-04



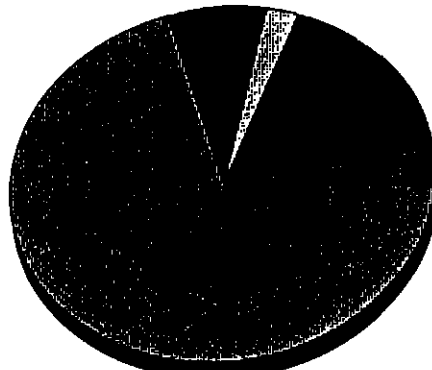
2004-05

- Clothes Washer Rebates
- Toilet Rebates
- Free Toilets

Commercial Peak Day Water Savings



2003-04



2004-05

- Other
- Spray Valves
- Commercial Rebates
- Irrigation Programs
- Toilet Rebates
- Free Toilets

Water Conservation Honors and Awards

Date	Project	Award	Awarding Agency
Jan-86		School & City Partnership Award	Community Education
Jan-86		Named Lifetime Charter Member	National Xeriscape Council
Apr-87	Xeriscape Program	Merit Award	American Society of Landscape Architects - Texas Chapter
Jan-89		Texas Xeriscape Award	Xeriscape Advisory Board
Apr-91	Xeriscape Brochure and Marketing Package	Merit Award	American Society of Landscape Architects - Texas Chapter
Apr-93		Environmental Award	Lower Colorado River Authority
Mar-94	"Xeriscape It" Rebate Program	Conservation & Reuse Award	Texas Section AWWA
Jan-95	Water Conservation	Long-Term Leadership Award	Bureau of Reclamation, US Dept. of Interior
Mar-95	ULF Toilet Outreach Program	Conservation & Reuse Award	Texas Section AWWA
Apr-95	Xeriscape Gardening for Austin video	Honor Award	American Society of Landscape Architects - Texas Chapter
May-96	Dowser Dan Calendars	Best of Austin: Award of Merit	International Association of Business Communicators, Austin Chapter
May-97	Dowser Dan Board Game	Best of Austin: Award of Excellence	International Association of Business Communicators, Austin Chapter
Aug-97		August 14, 1997 proclaimed Dowser Dan Day in Austin	City of Austin, Mayor Kirk Watson
Jan-99	Outstanding Efforts in Environmental Protection and Pollution Prevention	State of Texas Honors	Texas Natural Resources Conservation Council
Apr-99	WaterWise Irrigation Program	Conservation & Reuse Award	Texas Section AWWA
Mar-02	Alternative On-Site Water Sources Program	Conservation & Reuse Award	Texas Section AWWA
Mar-02	ICI Newsletter	Watermark Award	Texas Section AWWA
Apr-03	Spring House and Garden Show	Most Educational Exhibit	Home Builders Association of Greater Austin
Mar-05	WaterWise Electronic Newsletter	Watermark Award	Texas Section AWWA
Mar-05	Water In Our World	Watermark Award	Texas Section AWWA
Mar-05	2005 Toilet Mailer	Watermark Award - Honorable Mention	Texas Section AWWA
Mar-06	Water Conservation Website	Watermark Award	Texas Section AWWA
Mar-06	ET Calculator Irrigation Efficiency Project	Conservation & Reuse Award	Texas Section AWWA
Mar-06	Rainwater Harvesting Demonstration Projects	Conservation & Reuse Award	Texas Section AWWA
June-06	WaterWise Newsletter	Bronze Quill	International Association of Business Communicators, Austin Chapter
June-06	2005 Toilet Mailer	Bronze Quill	IABC, Austin Chapter
June-06	Water Conservation Website	Award of Merit	IABC, Austin Chapter
June-06	Water Waste Newsletter Article	Award of Merit	IABC, Austin Chapter



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